

**MINUTES**  
**ENVIRONMENTAL REVIEW COMMISSION**  
October 11, 2012

The Environmental Review Commission (ERC or Commission) met on Thursday, October 11, 2012 at 9:30 a.m. in Room 544 of the Legislative Office Building. Representative Samuelson presided.

The following members were present: Representative Mitch Gillespie Co-Chair, Senator Stan Bingham, Senator Fletcher Hartsell, Senator Brent Jackson, Representative William Brisson, Representative Joe Hackney, Representative Carolyn Justice, and Representative Chuck McGrady. Also present were: Mr. Jeff Hudson, Ms. Jennifer McGinnis, and Mr. Peter Ledford, Commission Counsels; Ms. Mariah Matheson, Research Assistant; Ms. Susan Phillips, Commission Clerk; and Sergeants-at-Arms John Brandon, Martha Gadison, Steve Wilson, Anderson Meadows and Billy Fritcher.

On August 30, 2012, notice was sent to members and interested parties via e-mail. A copy of this notice is incorporated into these minutes as Attachment #1. Copies of the agenda for the meeting and visitor registration sheets are incorporated into these minutes as Attachment #2 and Attachment #3.

**Call to order and introductory remarks**

Representative Samuelson called the meeting to order and welcomed members, staff, and visitors in attendance. There were no introductory remarks made by the Commission Co-Chairs. Representative Samuelson recognized Jeff Hudson, Commission Counsel, for an overview of the meeting.

**Quarterly Report by the Environmental Management Commission (EMC)**

Representative Samuelson recognized Stephen T. Smith, Chairman, Environmental Management Commission (EMC), to make his presentation on the quarterly reports on the operations, activities, programs, and progress of the Environmental Management Commission from January 2012 through September 2012. These three reports are included in these minutes as Attachments #4, #5, and #6. Mr. Smith reviewed the highlights of the quarterly reports.

Senator Jackson asked which states were represented at the North Carolina Forum on Nutrient Over-Enrichment.

Mr. Smith said that presenters came from Florida, Mid-Atlantic, and the New England states. Mr. Smith offered to provide the Commission with the forum agenda and a list of the speakers (Attachments #7 and #8).

Representative Gillespie asked if the EMC has considered allowing selective timber cutting within a buffer if performed under the supervision of a forestry official.

Mr. Smith indicated that the EMC has not discussed this issue yet.

Ms. Robin Smith, Assistant Secretary of Environment and Natural Resources said that she would make a note of this and respond back to Representative Gillespie directly.

Representative Gillespie asked for information on the 303(d) list.

Mr. Smith replied that the 303(d) list is a section of the Clean Water Act. Periodically the State surveys waters to determine which waters should be designated as impaired. The Clean Water Act requires that a list of impaired waters be prepared and sent to the United States Environmental Protection Agency (U.S. EPA). The U.S. EPA either approves or disapproves the list and from that list each state develops a strategy to deal with those surface waters and the extent of their impairment.

Representative Gillespie asked how ecological flow is considered when creating a 303(d) list.

Mr. Smith responded that ecological flow is not considered when determining if a water body is classified as impaired under the 303(d) list. Ecological flow is a separate issue.

Representative Gillespie asked how the EMC creates a list of impaired waters and what methodology/criteria do they use to determine if a water body is impaired.

Mr. Smith replied that the methodology was developed by the Department of Environment and Natural Resources (DENR).

Rep. Gillespie asked that Ms. Smith speak to the methodology.

Ms. Smith said that there is not a single methodology for a single pollutant. For example mercury pollution is determined in a different way versus other metals. There are also water quality standards for most pollutants for North Carolina streams. The determination of impairment is based on the sampling set. Ms. Smith noted that the Division of Water Quality staff is more familiar with this subject and can make a future presentation to the Commission.

Representative Gillespie said that the Commission could hear a presentation on ecological flow in the November meeting.

Representative Gillespie asked if the General Assembly directed the EMC to prioritize and identify these impaired waters and create the methodology. According to Representative Gillespie, the statute directs the EMC to perform this function, not DENR.

Ms. Smith replied that she was not aware of any legislative direction with respect to impaired water designations. It was Ms. Smith's understanding that DENR is responding to the requirements of the Clean Water Act. There are State laws that direct DENR to act on a priority basis on certain types of programs. For example, DENR has very specific direction to act based on human health and environmental risks and prioritize contaminated sites.

Representative Gillespie directed Ms. Smith to G.S. 143B-282 where it reads that the EMC shall implement provisions of this subsection and will identify and prioritize the impaired waters. The EMC has recently requested public comment as to whether or not they should perform this task when the General Assembly has already directed the EMC to. Upon receiving the information from DENR, the EMC should identify and prioritize these waters.

Ms. Smith replied that these may be two separate issues. One issue is the designation of the waters as impaired. This is a technical determination of whether that water body is meeting water quality standards or not.

With regard to the EMC, the EMC is the body with the authority to address those impairments, but the designation as an impaired water is just a listing. The designation is based on water quality monitoring and is a list of impaired waters based on water quality data. It is the EMC's role to adopt standards or programs to address the impairment. Ms. Smith referred to Mr. Smith for additional comment.

Mr. Smith said that there are a number of things that the General Assembly has given the EMC statutory authority to do. One, for instance, is issuing air quality and water quality permits. Years ago the EMC delegated the permitting authority to staff because the EMC doesn't have the technical expertise or manpower to deal with the permit applications received. The actual review of permit applications, including both air and water, and issuance of those permits is a staff function. The development of the methodology for the 303(d) list has been delegated by the EMC to staff. It is highly scientific and technical. As the EMC has looked at the Statewide Total Daily Maximum Load (TDML) for mercury, the EMC had questions about the methodology. This has led the EMC to consider the statute and the extent to which the EMC should reassert itself into the development of the methodology for the 303(d) list. The EMC believes that a good first step is to ask for public comment. The EMC received an excellent set of comments from Progress Energy. However, the EMC cannot perform the entire methodology development. If the EMC needs to be involved in the development process, how much and to what extent? How much should the staff be delegated and what should the EMC do?

Representative Gillespie asked if the EMC vote on whether to delegate the development process to the State and then go to public comments.

Mr. Smith replied that it is likely that the EMC will ask for public comment as to the EMC's involvement in the development of methodology. Mr. Smith anticipates that the EMC will consider the extent to which the EMC should be directly involved with the methodology or if it should remain a staff function. The EMC will delegate to staff the portions that the EMC is not able to handle, which will be the bulk of it. There is also a question as to the extent to which the EMC engages in oversight of the process. The EMC believes that the best way to start the process is to ask for public comment, because there are people who have studied TDMLs, 303(d) lists, and methodologies for their careers. Some of whom are in the regulated community, the academic community, and State government.

Representative Hackney asked which statute Representative Gillespie was referring to.

Representative Gillespie referenced G.S. 143B-282(c) and (d). Representative Gillespie acknowledged that the EMC does not likely have the expertise needed for the development of the methodology for the 303(d) list, however, he asked if the EMC should vote and decide whether or not to delegate this function.

Representative Brisson asked about the report on the reclassification for water supply intake. Representative Brisson noted that the EMC did not specify the conditions of the river, for example, phosphorous levels. If shown, what percentage is due to city development versus agricultural development? Who is the high contributor?

Mr. Smith said that these changes were only related to public water intake, which is the local government's ability to take water out of the stream and is only for designation intake purposes. With regard to the quality of the streams, the EMC will send the Commission the requested river basin-wide report and the major contributors.

Representative Samuelson asked if there was any good news to report in changes in water quality.

Mr. Smith said that DENR issues a report every three years.

Senator Bingham asked Mr. Smith for a report on Polychlorinated Biphenyls (PCBs) in the Yadkin and Badin rivers.

Mr. Smith said that he would provide it to the Commission, which is included as Attachment #9.

### **Annual State Water Supply Plan Report**

Representative Samuelson recognized Mr. Thomas A. Reeder, Director of the Division of Water Resources (DWR), DENR. Mr. Reeder presented the Annual State Water Supply Plan Report to the Commission. A copy of the presentation is included in the attachments to these minutes as Attachments #10 and 11#. At the conclusion of his presentation the members asked questions.

Mr. Reeder noted that there are several dozen water systems in the State that cannot account for 31% to 50% of their water and that there are several water systems that will require an interbasin transfer (IBT) by 2050.

Representative Gillespie asked if Mr. Reeder would provide a list of the water systems that will need IBTs by 2050.

Mr. Reeder said that he would provide the Commission with the specific water systems at the ERC meeting in November.

Representative McGrady asked if there was any linkage between the 37 water systems in the State that can't account for 31-50% of their water supply and the geographical location of those systems. Is this problem more prevalent in the mountain areas.

Mr. Reeder said that the water loss is partially due to geography, as the mountain region of the State may be subject to more water loss. Water must be pumped at increased pressures through mountainous terrain. In addition to geography, Mr. Reeder said that improper metering, antiquated systems, and lack of staff could contribute to pervasive water loss. Mr. Reeder noted that none of the major water systems have this problem.

Senator Hartsell asked if Mr. Reeder and DWR has been following the L&S Water Power, Inc. v. Piedmont Triad Regional Water Authority case pending before the North Carolina Supreme Court. If so, has DWR intervened.

Mr. Reeder replied that the Attorney General's office is following it and DWR has not intervened.

Senator Bingham asked if rising water levels in the aquifers will continue. If so, does that mean that the aquifers could return to 100%.

Mr. Reeder replied said that yes it could.

Senator Bingham asked about salt water incursion in the aquifers.

Mr. Reeder said that once salt water incursion occurs it is almost impossible to overcome the problems created. Nano filters and desalination are possibilities, but both processes are very expensive. North Carolina needs to use aquifers in a sustainable fashion so the aquifer does not depressurize.

Representative Samuelson asked how pressure can be increased in an aquifer.

Mr. Reeder explained how an aquifer works. The more water stored in an aquifer the more pressure it will have. As it recharges through rain water the pressure goes up.

Senator Bingham asked if some of these water systems have leakages. Could this be improved with efficiencies.

Mr. Reeder said that some water infrastructure in the State is so old that all water systems in North Carolina have leakages due to age. A lot of leakages occur because the water systems do not have the resources to manage their systems.

Representative Samuelson asked Mr. Reeder to describe the differences between the OASIS model versus the CHEOPS model. South Carolina is using the OASIS model, whereas the CHEOPS model is used for the Catawba river basin.

Mr. Reeder asked Mr. Tom France, Deputy Director of DWR for input. Mr. France replied that DWR is using CHEOPS model for the Catawba river basin and North and South Carolina, but once the updates are done both states are going to convert to the OASIS model for the future.

Representative Samuelson asked if the City of Raleigh can reallocate water quality storage into water supply storage.

Mr. Reeder replied that that is what the model allows DWR to do. DWR contacted the Army Corps of Engineers (Corps) and asked if DWR can do a reallocation study. The Corps is receptive. DWR is in the initial phase of beginning that study.

## **Report on the 2011 Agriculture Water Use Survey**

Representative Samuelson recognized Mr. Vernon Cox, Environmental Programs Specialist of the Department of Agriculture and Consumer Services, to present a report on the 2011 Agriculture Water Use Survey. Mr. Cox's presentation is included as Attachments #12 and #13.

Senator Bingham asked about aquaculture withdrawals.

Mr. Cox explained that most of those withdrawals are for trout production throughout the State.

Senator Bingham said he did not think aquaculture would be counted as a withdrawal, as it's considered a flow-through.

Mr. Cox said that it is consistent with what DWR considers a withdrawal, similar to hydroelectric.

Senator Jackson asked if agriculture water use was 1% of the total State water usage.

Mr. Cox said that number was accurate.

## **Presentation on the State Erosion and Sedimentation Control Program**

Representative Samuelson recognized Ms. Robin Smith and Mr. Tracey Davis, Division of Energy, Mineral and Land Resources, DENR, for a presentation on the State erosion and sedimentation control program. Mr. Davis' presentation is included in these minutes as Attachment #14.

Representative Gillespie asked about local programs delegated by the State and their schedule.

Mr. Davis replied that they are on a review schedule of every two years, if a problem is found they are placed on probation and the reviews are more frequent. If problems persist the State takes the program back.

Representative Gillespie asked if the Department has considered streamlining the review process using licensed engineers as opposed to unlicensed engineers.

Mr. Davis replied that a study was done several years ago. Plans submitted by licensed engineers were no better than plans submitted by unlicensed engineers. Mr. Davis explained the express permitting process and the benefit it offers. Mr. Davis indicated that DENR typically reviews plans within 20 days. DENR is educating the engineers and non-engineers on the requirements.

Representative McGrady noted that a higher percentage of mountain counties and jurisdictions have delegated programs.

Mr. Davis replied that most of the larger municipalities want to have control over their program. Some of the smaller municipalities do not. It's open to any county who wants to propose a plan. Mr. Davis is not sure why there are more delegated programs in the mountain areas rather than in the piedmont.

Representative McGrady observed that the State program is failing and the recommendations offered to help fix the program are not enough. There are not enough staff and funds to do the job. Representative McGrady asked about the State program's responsiveness. There needs to be a systematic look at this program.

Representative Hackney noted that there cannot be a successful sedimentation program without the staff to inspect the sites. The legislature has cut the program's staff.

Representative McGrady agreed with Representative Hackney with regard to the reduction of staff.

### **Plastics Recycling**

Representative Samuelson recognized several people to discuss plastics recycling. Mr. Scott B. Mouw, Chief-Community and Business Assistance Section, Division of Environmental Assistance and Outreach, DENR, presented an update on the degradable plastic study. Attachment #15.

Senator Bingham asked about page nine of Mr. Mouw's presentation. What is the difference between high-density polyethylene (HDPE) and polyethylene terephthalate (PET) plastic bottles. Is the weight measurement in tons or pounds.

Mr. Mouw said that PET is mostly plastic bottles such as soda bottles and water bottles or single serve drink bottles. HDPE has the ability to have handles, such as milk bottles and laundry detergent bottles. The weight is measured in tons.

Senator Bingham asked if DENR considered placing a deposit on these bottles.

Mr. Mouw replied that DENR doesn't have an opinion on deposits. Ten states have deposits now. Some communities in North Carolina have incentive based programs to encourage recycling of bottles. One bottling company does a lot of work with some of the larger municipalities to give people incentives to recycle.

Representative Samuelson stated that Coca Cola did this in Charlotte.

Representative Hackney said that there has been an increase in jobs in the plastic recycling industry in recent years.



Mr. Mouw said that North Carolina has had major investments in plastic bottle reclamation. Plastic bottle recycling has doubled in the past five to six years. Every time DENR does a study on plastic bottle recycling they note a 5% increase in plastic reclamation jobs.

Next, Mr. Scott Booth, Chief Operating Officer, Envision Plastics, made a presentation about Envision Plastics and how they recycle polyolefin resins. His presentation is included in these minutes as Attachment #16.

Senator Bingham asked if Envision was able to recycle bottles that had contaminants, like motor oil, pesticides, or hazardous waste.

Mr. Booth said that plastic bottles with contaminants occasionally get mixed in with other bottles. It is a small percentage and not a huge problem. Envision deals with plastics coming from the consumer waste stream, so they do not usually deal with hazardous waste. Also, Envision Plastics has their own wastewater treatment system.

Senator Bingham asked how Envision Plastics separates plastics by color.

Mr. Booth said that they separate the colors through a flake process. For example, there are a whole rainbow of colors that can create the color blue.

Mr. Chris Bradley, Vice President of Operations, Clear Path Recycling, gave a presentation on degradable additives as a threat to plastics recycling. His presentation is included in these minutes as Attachment #17.

Representative Hackney asked what level of degradable plastic additives would contaminate the waste stream.

Mr. Bradley replied that 100 parts per million could be tolerated. Mr. Bradley said that there haven't been any studies done to verify this.

Senator Bingham asked about recycling feedstocks.

Mr. Bradley said that the plastic feedstocks are for Clear Path Recycling's customers.

Mr. Terry Turner, Product Development Manager, Unifi Inc, gave a presentation about Unifi and their product Repreve, which is a synthetic yarn. His presentation is included in these minutes as Attachment #18.

Senator Bingham asked if ultraviolet (UV) light adversely affects their product.

Mr. Turner replied that in cases of excess exposure to UV light there is an additive for UV protection.

Senator Bingham asked if Unifi makes some of the lumber products shown in the presentation.

Mr. Turner replied that a lot of the lumber products are mixed plastics and lumber fiber, so Unifi prefers not to use lumber products.

Dr. Charles J. Lancelot, Executive Director of the Plastics Environmental Council, spoke about inert biodegradable plastics in the recycling stream. His comments are included in these minutes as Attachments #19 and #20.

Senator Bingham asked if there are polyethylene products that are permanent.

Dr. Lancelot replied that most polyethylene products are permanent unless you add a degradable additive to them. There are polyethylene products used for military purposes that are not degradable.

#### **Disposition of Reports** Attachment #21

#### **Commission discussion and announcements**

Representative Samuelson offered to the Commission members some correspondence she received from Mr. Mike Pucci, Chairman, North Carolina Coalition Against Uranium Mining. This is included in these minutes as Attachment #22. Representative Samuelson advised the Commission that the next meeting would be on Thursday, November 15<sup>th</sup> at 9:30 am.

There being no further business, the meeting was adjourned at 1:10 PM.

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Co-Chair Senator David Rouzer

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Co-Chair Representative Mitch Gillespie

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Co-Chair Representative Ruth Samuelson

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Susan D. Phillips, Commission Clerk